

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES**

In re patent application of:) Date: April 16, 2009
Frank S. Saavedra-Lim) Attorney Docket No.: E-833
Serial No.: 09/475,950) Customer No.: 00919
Filed: December 31, 1999) Group Art Unit: 3627
Confirmation No.: 7103) Examiner: Mussa A. Shaawat
Title:	METHOD AND SYSTEM OF UPGRADING THIRD PARTY FUNCTIONALITY IN AN ELECTRONIC FRAUD MANAGEMENT SYSTEM

APPELLANT'S BRIEF ON APPEAL

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This brief is in furtherance of the Notice of Appeal filed in this case on
March 13, 2009.

TABLE OF CONTENTS

- I. REAL PARTY IN INTEREST
- II. RELATED APPEALS AND INTERFERENCES
- III. STATUS OF CLAIMS
- IV. STATUS OF AMENDMENTS
- V. SUMMARY OF CLAIMED SUBJECT MATTER
- VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL
- VII. ARGUMENT
- VIII. CLAIMS APPENDIX
- IX. EVIDENCE APPENDIX
- X. RELATED PROCEEDING APPENDIX

I. Real Party in Interest

Pitney Bowes Inc. is the real party interest.

II. Related Appeals and Interferences

There are no related Appeals and Interferences.

III. Status of Claims

- (a) Claims 1-6, 9, 10 and 12 - 15 are in the application.
- (b) Claims 7, 8 and 11 have been canceled.
- (c) Claims 1-6, 9-10 and 12-15 are rejected.
- (d) Claims 1-6, 9-10 and 12-15 are on appeal.

IV. Status of Amendments

An Amendment subsequent to the Final Rejection of December 16, 2008, was filed on February 6, 2009. This Amendment was entered.

V. Summary of Claimed Subject Matter

Within the financial industry in general there is a marked propensity for fraud, which thus associates a certain degree of risk with each transaction or financial product introduction. This is particularly true in the credit card portion of the industry. Case history supports this conclusion. Fraud can, and does, originate both internally to the organization issuing the financial product, and externally, with customers, vendors, merchants, or criminals that intercept the communication of credit card information, electronically, or physically. Thus, fraud in this industry is expected.

Fraud is inherent in how credit cards are issued and handled. There is, for example, a significant threat to the issuer of a card from someone finding a lost credit card and using it to purchase gas in an automated gas station; and, telephone and mail orders may be made by criminals illegally possessing credit account information. In the same category, a fraudulent merchant may be operating fraudulently by selling merchandise on unequal consideration. On a larger scale, however, fraud rings are particularly active and include many players in their networks that defraud issuers of billions of dollars. Rogue employees and questionable merchants account for a significant part of skimming activity, which involves the illegal acquisition of account information in order to produce counterfeit cards or make fraudulent transactions. The sophistication of skimming is quite advanced in that criminals may wait up to eighteen to twenty (18-20) months after skimming a card before they use it. This category of fraud which originates at the point of sale is expected to be a twenty five billion dollar (\$25,000,000,000) problem in 1999.

Recent security conference statistics show that distinct trends emerge from studies of fraud. The top fraud types are lost, stolen, or counterfeit credit cards or accounts. Fraud losses resulting from lost and stolen credit cards (plastic) represent nearly sixty percent (60%) of all losses, with the fourth (4th) quarter of any year being the top fraud period. The hours of 12:00 Noon to 10:00 PM are the peak fraud activity times; California, Florida and New York are the top fraud states; and, Los Angeles, New York City, and Las Vegas are the top fraud cities. Telemarketing, phone use, and gas purchases are the top fraud industry groups.

While it is evident that fraud exists, and that it is extremely difficult to eliminate, even in the current technological environment, actions can be taken to control the impact of fraud.

The credit card industry is not totally defenseless when it comes to fraud. It is evident that acquirers (merchants), issuers (banks), the major credit card associations (ie., VISA@ and MasterCard@), and third party vendors are making their best efforts to stay on top of the issue. The theme of fraud management is currently one promoting early detection and warning and loss mitigation as close as possible to the point of sale. There are a number of

industry tools that are being employed to manage fraud and risk accordingly.

Applications for credit cards undergo scrutiny from such industry watchdogs and utilities as the VISA ICS (Issuer's Clearinghouse Service), from general information validation procedures, and from credit bureau fraud screen products such as SAFESCAN from Equifax, HAWK from TransUnion, or FACS from Experian. Transaction processing too, undergoes scrutiny from such industry methods as: the Fair Isaac Consumer Score (FICO); the Falcon - Neural Network Model (HNC); NESTOR - Neural Network Model; Queue Based Fraud Detection (TSYS DFS); the VISA Consumer Risk Score (CRIS); and, the VISA Magnetic Code Verification (CVV/CVC).

While the industry has taken steps to safeguard against fraud, it is recognized that the existing fraud detection technology (such as making calls to cardholders when a fraud is suspected) can impact desired customer service and convenience. Therefore, a balance is required in the state of fraud management that will allow the industry to protect itself while remaining commercially viable.

One aspect of progressive fraud management is the development of a concept, structure and effective method for allowing fraud to be identified, measured, and proactively managed at the task level. Another requirement for effective fraud management is the development of an ability to benchmark against the industry.

Appellants claimed invention claims a method that assesses a set of risks relative to granting credit on a financial product by applying a fraud to each assessment wherein the fraud is selected from a list of fraud that is representative of a defined area of risk.

Claim 1 is the only independent claim in this Patent Application.

Claim 1 relates to a method of managing and assessing a set of risks relative to a financial product, said method being accessed through a data processing system, wherein said data processing system comprises a series of nodes operatively connected with each other, the method includes the following steps:

- (a) performing an application processing procedure on one or more customers, comprising a check of the creditworthiness of one or more

selected customers; and issuing a financial product to one or more of said customers if said selected customer is determined to be creditworthy, thus resulting in an accepted customer, and declining said application if said customer is determined to be not creditworthy; (Fig. 10, step 900)

(b) assessing a credit authorization request from a system user, wherein said request is initiated by a use of said financial product; (Fig. 10, step 901)

(c) utilizing a predictive modeling routine to perform said assessment; (Fig. 10, step 904)

(d) accepting or declining said credit authorization request as based upon an outcome of said assessment; (Fig. 10, step 905)

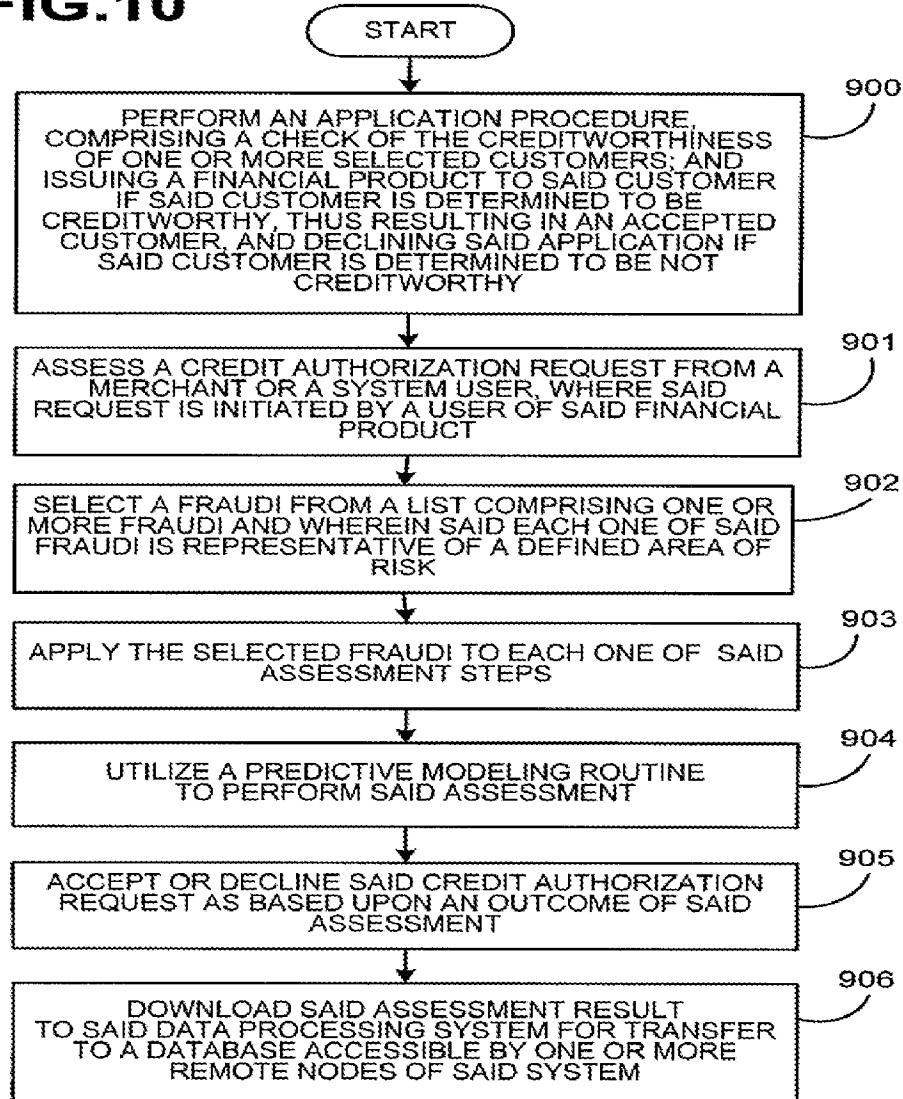
(e) downloading an assessment result to said data processing system for transfer to a database accessible by one or more remote nodes of said system; (Fig. 10, step 906)

(f) applying a fraud indicator to each assessment and wherein said fraud indicator is selected from a list of fraud indicator and wherein each of said fraud indicator on the list is representative of a defined area of risk; (Fig. 10, step 903) and

(g) determining fraud loss ratios to benchmark risk management effectiveness. (Fig. 9, line 15, page 27 – page, line 5)

Appellant's invention is shown in Fig. 10 which was added to page 28, of the specification by a September 17, 2002 entered Amendment and line 15 of page 27 to line 5 of page 28 of Appellant's Patent application. Claim 1 is also illustrated in Figs. 10 and 9.

FIG.10



"After the program starts, the program goes to block 900. In block 900, the program performs an application procedure, comprising a check of the creditworthiness of one or more selected customers; and issuing a financial product to said customer if said customer is determined to be creditworthy, resulting in an accepted customer, and declining said application if said customer is determined to be not creditworthy. Then the program goes to block 901 to assess a credit authorization request from a merchant or a system user, where said request is initiated by a user of said financial product. Now the program goes to block 902 to select a fraud from a list comprising one or more fraud and

wherein said each one of said fraud is representative of a defined area of risk. Then the program goes to block 903 to apply the selected fraud to each one of said assessment steps. Then the program goes to block 904 to utilize a predictive modeling routine to perform said assessment. Now the program goes to block 905 to accept or decline said credit authorization request as based upon an outcome of said assessment. Then the program goes to block 906 to download said assessment result to said data processing system for transfer to a database accessible by one or more remote nodes of said system.”

FIG. 9 is a block diagram of the application screen that allows a system user to determine fraud loss ratios as a means for benchmarking risk management effectiveness. The ratios and methodologies for each of the targeted ratios is as follows:

Flo = <u>Fraud Losses</u> Outstanding	<i>Flo measures fraud losses as a function of total outstandings. The total outstandings is interpreted as a general measure of the portfolio maturity. This is used for benchmarking total fraud.</i>
Flv = <u>Fraud Losses</u> Volume	<i>Flv measures fraud losses as a function of volume of total sales. The total sales number is interpreted as an index of transaction activity. This is used for benchmarking transaction fraud.</i>
<u>Fraud Losses</u> 1.	<i>Flc is an indicator of the contribution fraud losses make to total charge-offs.</i>
Le = <u>Σ(Fraudulent Credits – Fraudulent Losses)</u> 2.	Fraudulent Credits
FLp = Fraudulent Credits – Fraudulent Losses	

VI. Grounds of Rejection to be Reviewed on Appeal

Whether or not claims 1-6, 9-10 and 12-15 are patentable under 35 USC §

103 (a) over Basch et al. (U.S. Patent No. 6,119,103).

VII. Argument

Claims 1-6, 9-10 and 12-15 have been rejected by the Examiner under 35 USC § 103 (a) over Basch et al. (U.S. Patent No. 6,119,103).)

Claims 1 - 6 and 10

Basch discloses the following in col. 3, lines 50-62.

The invention relates, in one embodiment, to a computer-implemented method for predicting financial risk, which includes receiving transaction data pertaining to a plurality of transactions for a financial account, the transaction data including one of a transaction type and a transaction amount for each of the plurality of transactions. The method further includes scoring the transaction data, including a transaction pattern ascertained from the transaction data, based on a preexisting model to form a score for the financial account. The method further includes transmitting, if the score is below a predefined financial risk threshold, the score to an account issuer of the financial account.

Basch discloses using a preexisting model to form a score for a financial account.

The Examiner stated the following in Pages 2 and 3 of the Final Rejection.

“Basch does not explicitly disclose benchmarking risk management effectiveness by determining fraud loss ratios. However, benchmarking risk management effectiveness by determining fraud loss ratios, is certainly well known to those of ordinary skill in the art, and official notice to that effect is hereby taken. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Basch, so as to include benchmarking risk management effectiveness by determining fraud loss ratios as is well known to do, in order to track and understand the effectiveness of the risk management program, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Examiner notes that Official Notice was relied upon to teach the above limitation (g) when it was claimed in claim 11, and official notice still applies to limitation (g) since it is the same as in claim

11. Therefore since the examiner took Official Notice fact to claims 11-14 taken by the examiner on 12/27/2007, and the appellant failed to specifically point out the supposed errors in the examiner's action, and to state why the notice fact is not considered to be common knowledge or well known in the art. In view of the inadequate traversal, and in light of the requirements of 2144.03(c), the examiner notes that the well known in the art statements of the previous Office Action are considered to be admitted prior art. Furthermore the Official Notice Traversal is no longer seasonable, therefore the Official Notice is considered to be admitted prior art."

As noted in the MPEP, Section 2144.03 A, official notice unsupported by documentary evidence should only be taken by the Examiner where the facts to be asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. The notice of facts beyond the record which may be taken by the Examiner must be "capable of such instant and unquestionable demonstration as to defy dispute." In re Ahlert, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970). Applicants respectfully submit that Official Notice cannot be used to support a contention that something would have been obvious, as whether or not something would have been obvious is not capable of instant and unquestionable demonstration as being well-known. In the event that this was not an oversight by the Examiner, Applicants respectfully request that the Examiner to produce documentary evidence to support the statement that it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine fraud loss ratios to benchmark risk management effectiveness.

Basch and/or Official Notice does not disclose or anticipate steps f and g of claim 1 namely (f) applying a fraud indicator to each assessment and wherein said fraud indicator is selected from a list of fraud indicator and wherein each of said fraud indicator on the list is representative of a defined area of risk; (g) and determining fraud loss ratios to benchmark risk management effectiveness and those claims dependent thereon.

Claim 9

Claim 9 depends on claim 1. In claim 9, a set of data relative to said credit authorization request is retained in a memory of said data processing system and utilized to determine the effectiveness of an assessment methodology.

The Examiner stated the following in page 4 of the Final Rejection.

“Regarding claim 9, in the method of Basch, a set of data relative to said credit authorization request is retained in a memory of said data processing system Basch does not explicitly disclose that the data is retained for the purpose of being utilized to determine the effectiveness of an assessment methodology. However, reviewing results to determine the effectiveness of a method over time is certainly well known, hence obvious, to those of ordinary skill in the art of lending, and official notice to that effect is hereby taken. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have further modified the method of Basch, so as to utilize the retained results for the purpose determining the effectiveness of an assessment methodology (if such was not already being done), as is well known to do, in order to learn how to continually improve the assessment methodology to identify a greater and greater percentage of the fraudulent applications, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.”

Contrary to the Examiner’s assertion it is not well known retain a set of data relative to a credit authorization request in a memory of a data processing system to determine the effectiveness of an assessment methodology.

Claims 12 – 14

The Examiner stated the following in Pages 4 and 5 of the Final Rejection.

“Regarding claims 12-14, Basch, do not explicitly disclose benchmarking risk management effectiveness by determining fraud loss ratios, including the ratio of fraud loss to any of portfolio maturity, volume of total sales, or total charge-offs. However, benchmarking risk management effectiveness by determining fraud loss ratios, including the ratio of fraud loss to any of portfolio maturity, volume of total sales, or total charge-offs, is certainly well known to

those of ordinary skill in the art, and official notice to that effect is hereby taken. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Basch, so as . to include benchmarking risk management effectiveness by determining fraud loss ratios, including the ratio of fraud loss to any of portfolio maturity, volume of total sales, or total charge-offs, as is well known to do, in order to track and understand the effectiveness of the risk management program, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.”

Contrary to the Examiner’s assertion it is not well known for measuring fraud losses as a function of portfolio maturity (Claim 12); measuring fraud losses as a function of volume total sales (claims 13) and determining a contribution of fraud losses in total charge offs (claims 14) have not been disclosed by the cited art.

Claim 15

Claim 15 depends on claim 1. In claim 15, the fraud indicator is selected from the group consisting of a change in social security number, a change in personal identification number, a change of address, a change of phone number, account closures, questionable purchases, and questionable chargebacks.

The Examiner stated the following in Page 4 of the Final Rejection.

As per claim 15, Basch teaches wherein the fraud indicator is selected from the group consisting of a change in social security number, a change in personal identification number, a change of address, a change of phone number, account closures questionable purchases, and questionable chargeback's (see at least col.1).

FINANCIAL RISK PREDICTION SYSTEMS AND METHODS THEREFOR RELATED PATENT APPLICATION

The following patent application(s) are incorporated herein by reference. Commonly assigned patent application entitled "Method and Apparatus for Pattern Generation," by inventors Kevin P.

Siegel, Patrick L. Faith, and Theodore P. Washburne, filed on even date (Attorney Docket No. VISAP002).

BACKGROUND OF THE INVENTION

The present invention relates to financial risk prediction systems (FRPS). More particularly, the present invention relates to improved methods and apparatus for a transaction based risk prediction system that advantageously assess the financial risk level associated with an account and/or an account holder based on the account holder's transaction pattern and/or transactions pertaining to that account holder across multiple accounts and/or account issuers.

In recent years, account issuers (e.g., banks, credit unions, mortgage companies, and the like) have significantly increased the types and volumes of accounts issued to account holders. A typical account holder (e.g., an individual or business account holder) nowadays may be issued, for example, multiple charge (credit) accounts, one or more mortgages, multiple revolving accounts, and/or one or more installment payment plans. For a majority of account holders, good financial planning results in financial stability and solvency. There are, however, a significant percentage of account holders who, for various reasons (e.g., unanticipated changes in life's circumstances, credit abuse, or even fraud), do not live up to the obligations they incurred to account issuers.

When account holders default (e.g., simply refuse to pay the amount owed or declare bankruptcy altogether), account issuers may at times be forced to resort to costly collection procedures and/or to write off the amounts owed altogether. As can be appreciated from the foregoing, when an account holder declares bankruptcy for example, the amount lost maybe substantial since most or all credit accounts (charge/credit accounts, mortgages, revolving accounts, installment payment plans, and/or others) may be discharged under bankruptcy laws. The losses increase, for example, the cost of credit to all current and potential account holders, including those having satisfactory credit histories.

To minimize losses, account issuers have constantly been searching for ways to predict in advance accounts and/or account holders who are at risk for credit default and/or fraud. By way of example, account issuers routinely employ credit bureaus, essentially data collection services, to ascertain whether an applicant for new or additional credit is sufficiently credit-worthy for the type of account and amount that he is applying for. If an applicant wishes to apply for a Visa credit card account, for example, a potential issuing bank may request a credit report on

the applicant from one or more credit bureaus to ascertain whether the applicant has a satisfactory credit history, adequate income, reasonable debt-to-income ratio, and the like, before deciding whether the applicant should be approved for the credit account and what the appropriate credit limit should be.

To facilitate the management of accounts, account issuers may employ scores developed by credit bureaus. These scores may, for example, be utilized to assist in some aspects of account management, e.g., in the account issuer's decision to increase or decrease the current limit.

Basch discloses that a potential creditor may request a credit report on the Applicant from one or more credit bureaus to ascertain whether the Applicant has a satisfactory credit history, adequate income, reasonable debt-to-income ratio and the like, before deciding whether the Applicant should be approved for credit.

Basch does not disclose or anticipate a fraud indicator that may be a change in social security number, a change in personal identification number, a change of address, a change of phone number, account closures, questionable purchases, and questionable chargebacks.

Notwithstanding the foregoing, in rejecting a claim under 35 U.S.C. §103, the Examiner is charged with the initial burden for providing a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 375 F.2d 385, 148 USPQ 721 (CCPA 1966); *In re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970). The Examiner is also required to explain how and why one having ordinary skill in the art would have been led to modify an applied reference and/or combine applied references to arrive at the claimed invention. *In re Ochiai*, 37 USPQ2d 1127 (Fed. Cir. 1995); *In re Deuel*, 51 F.3d 1552, 34 USPQ 1210 (Fed. Cir. 1995); *In re Fritch*, 972 F.2d 1260, 23 USPQ 1780 (Fed. Cir. 1992); *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988). See *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 127 S.Ct. 1727, 1735 (2007) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.* (quoting Kahn, 441 F.3d at 988)). See

also, Takeda Chem. Indus., Ltd. v. Alphapharm Pty., Ltd., 492 F.3d 1350, 1357 (Fed. Cir. 2007) (To avoid improper use of hindsight, the Examiner must articulate “a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does” in an obviousness determination. (quoting *KSR*, 127 S. Ct. at 1731)).

See also, In re Kahn, 441 F.3d 977 (Fed. Cir. 2006) (Most inventions arise from a combination of old elements and each element may often be found in the prior art. However, mere identification in the prior art of each element is insufficient to defeat the patentability of the combined subject matter as a whole).

Appellant respectfully submits that the final rejection of claims 1-6, 9-10 and 12-15 is in error for at least the reasons given above and therefore should be reversed.

Respectfully submitted,

/Ronald Reichman/
Ronald Reichman
Reg. No. 26,796
Attorney of Record
Telephone (203) 924-3854

PITNEY BOWES INC.
Intellectual Property and
Technology Law Department
35 Waterview Drive
P.O. Box 3000
Shelton, CT 06484-8000

VIII. CLAIMS APPENDIX

1. A method of managing and assessing a set of risks relative to a financial product, said method being accessed through a data processing system, wherein said data processing system comprises a series of nodes operatively connected with each other, said method comprising the steps of:

(a) performing an application processing procedure on one or more customers, comprising a check of the creditworthiness of one or more selected customers; and issuing a financial product to one or more of said customers if said selected customer is determined to be creditworthy, thus resulting in an accepted customer, and declining said application if said customer is determined to be not creditworthy;

(b) assessing a credit authorization request from a system user, wherein said request is initiated by a use of said financial product;

(c) utilizing a predictive modeling routine to perform said assessment;

(d) accepting or declining said credit authorization request as based upon an outcome of said assessment;

(e) downloading an assessment result to said data processing system for transfer to a database accessible by one or more remote nodes of said system;

(f) applying a fraud indicator to each assessment and wherein said fraud indicator is selected from a list of fraud indicator and wherein each of said fraud indicator on the list is representative of a defined area of risk; and

(g) determining fraud loss ratios to benchmark risk management effectiveness.

2. The method of claim 1, wherein said financial product is a credit card.

3. The method of claim 1, wherein said accepted customer is a business entity.

4. The method of claim 1, wherein said accepted customer is an individual and wherein an account is representative of a business affiliation and said set of risks is a function of an individual's profile.
5. The method of claim 1, wherein said accepted customer is an individual and wherein an account is representative of a business affiliation and said set of risks is a function of a business' profile.
6. The method of claim 1, wherein said accepted customer is an individual, and wherein an account is representative of an individual's and a business' affiliation, and said set of risks is a function of an individual's profile and a business' profile.
9. The method of claim 1, wherein a set of data relative to said credit authorization request is retained in a memory of said data processing system and utilized to determine the effectiveness of an assessment methodology.
10. The method of claim 1, wherein a filtering step comprises a credit score filter for eliminating a portion of a population that does not pass through said filter.
12. The method claimed in claim 1, further including the steps of:
measuring fraud losses as a function of a portfolio maturity.
13. The method claimed in claim 1, further including the step of:
measuring fraud losses as a function of volume of total sales.
14. The method claimed in claim 1, further including the step of:
determining a contribution of fraud losses in total charge offs.

15. The method claimed in Claim 1, wherein the fraud indicator is selected from the group consisting of a change in social security number, a change in personal identification number, a change of address, a change of phone number, account closures, questionable purchases, and questionable chargebacks.

IX. EVIDENCE APPENDIX

There is no additional evidence to submit.

X. RELATED PROCEEDING APPENDIX

There are no related appeals and interferences.